

ORIGINAL  
(Red)COMMONWEALTH OF PENNSYLVANIA  
Environmental Resources  
March 12, 1985  
8-354-1975

SUBJECT: Industrial Wastes - PCB Contamination  
NWF Company  
Kennett Square Borough, Chester County

TO: Wayne Lynn  
Regional Solid Waste Manager

Thru: Leon T. Gonshor  
Regional Director

FROM: JOSEPH A. FEOLA  
Regional Water Quality Manager

The purpose of this memo is to notify your Bureau of the National Vulcanized Fiber (NWF) PCB contamination problem. High levels of PCB's have been detected in a swale which drains water from the NWF plant site located at Kennett Square Borough, Chester County to the West Branch Red Clay Creek. Stream sediment and fish have been found to contain unacceptable levels of PCB's. The Department issued a press release in September, warning the public to avoid eating fish from the Red Clay Creek. We have also found that aquatic invertebrates in the stream have been severely reduced, threatening the integrity of the stream's ecology.

Red Clay Creek flows into the state of Delaware and provides a major recreational trout fishery in that state. We are very concerned that contaminated sediment will be translocated into Delaware and contaminate their trout fishery.

Attached are copies of our most recent sediment samples. As you will see there are really two major contaminants affecting the stream, PCB's and pesticides (mainly DDT). The source of the contaminants are different. We believe we have identified the major source of PCB's as coming from the NWF, Kennett Square Plant, but have not found the source of the DDT. We have repeatedly met with NWF attempting to arrange a clean-up of the PCB's on site and in the swale tributary to the Red Clay Creek. NWF has removed contamination from the source, a press pit which became contaminated when the press was formerly heated with oil containing PCB's in the later 1960's. NWF has also hired a consultant (Weston) for a preliminary study and a PCB audit of the Kennett Square site. A copy of this study is attached. NWF Company has refused to proceed with any other clean-up at the site.

We therefore are requesting a review of the case for emergency finding for the immediate removal of PCB contaminated sediments from the swale beginning at the NWF plant site and extending downstream to the confluence with the W. B. Red Clay Creek. Additional study to determine the feasibility of removing sediment from future identified "hot spots" in the West Branch of Red Clay Creek is also warranted.

cc: Mr. Stanley  
Re 30 5GC30

ATTACHMENT

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

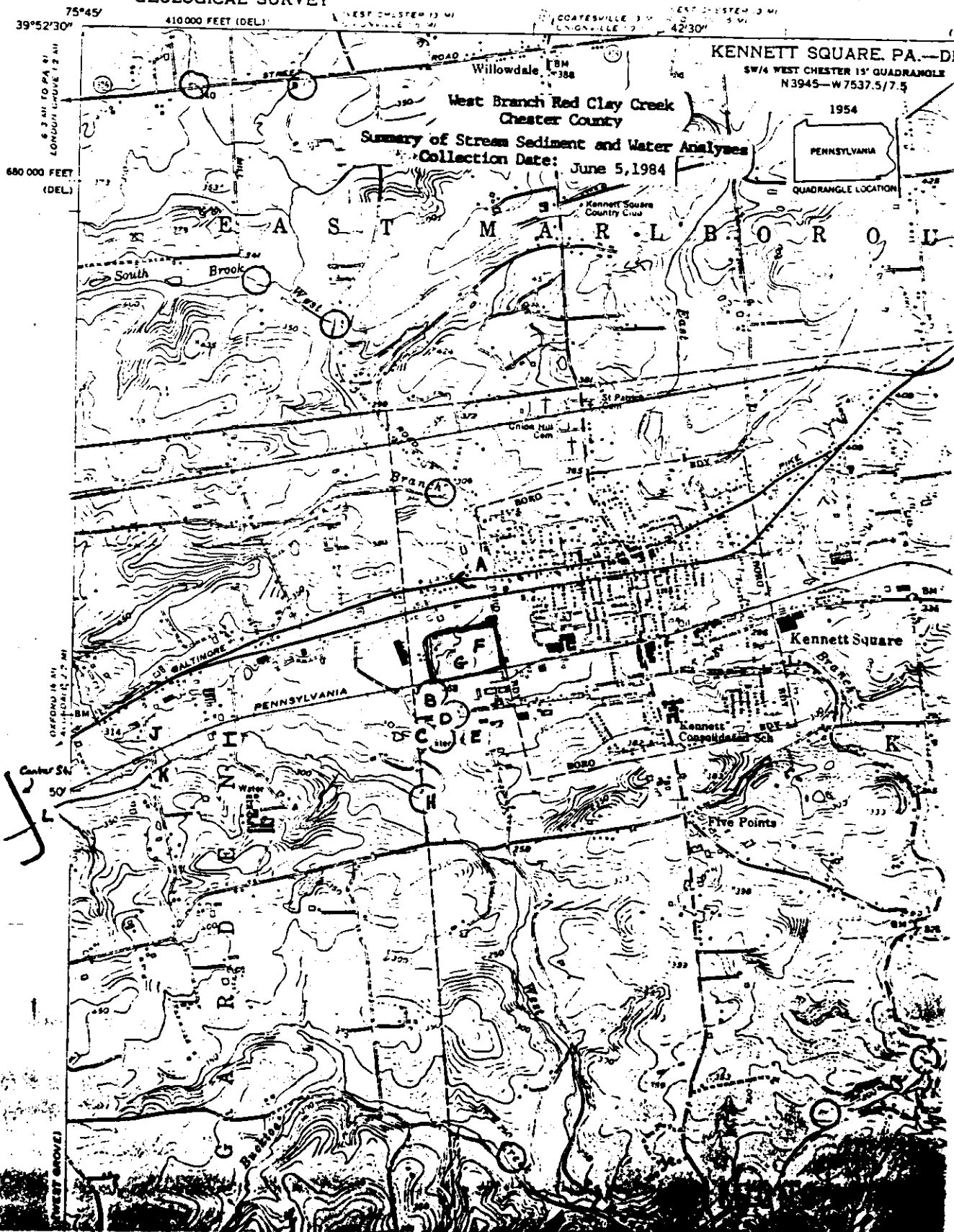


TABLE 1:

West Branch Red Clay Creek  
Chester County  
Summary of Stream Sediment Chemical Analyses  
collection date June 5, 1984

Station No.	Stream Name	Location	Compound	Concentration ( $\mu\text{g/kg-ppb}$ )
A	W.B. Red Clay	Old Route One	Pesticides	none detected
			PCB's	none detected
B	W.B. Red Clay	upstream <sup>South</sup> State St.	DDE	6.0
			DDD	7.0
			DDT	14.0
			Pyrene	<40.0
			Fluoranthene	<40.0
C	W.B. Red Clay	75 yds. below State Street <sup>South</sup>	PCB's	190.00
			DDE	18.00
			DDD	15.00
			Fluorene	60.00
			Phenanthrene	850.00
			Anthracene	230.00
			Fluoranthene	1300.00
			Pyrene	1000.00
			Chrysene	560.00
			Benzo(A)Anthracene	470.00
			Benzo(A)Pyrene	730.00
			Benzo(GHI)Perylene	560.00
D	NVF Trib.	<sup>SOUTH</sup> State Street	PCB's	8400.00
			DDE	700.00
			DDD	820.00
			DDT	1900.00
			Naphthalene	<40.00
			Acenaphthylene	230.00
			Fluorene	78.00
			Phenanthrene	1400.00
			Fluoranthene	4500.00
			Pyrene	4500.00
			Chrysene	2800.00
			Benzo(A)Anthracene	1700.00
			Benzo(B)Pyrene	1100.00
			Benzo(GHI)Perylene	900.00
			Benzo(3) Fluoranthene	3500.00
E	Sewage Sludge	Kennett Square STP	DDE	1000.00
			DDD	340.00
F	Soils	Nojenski Junkyard	PCB's	910.00
			Naphthalene	140.00
			Acenaphthylene	<40.00
			Phenanthrene	180.00
			Anthracene	40.00
			Fluoranthene	400.00
			Pyrene	400.00
			Benz(A)Anthracene	240.00
			Alkyl Benzenes	present
			Olifins	present

000000  
(10)

who wrote in ?

also  $\Sigma$  28,700

TABLE 1: (continued)

West Branch Red Clay Creek  
Chester County  
Summary of Stream Sediment Chemical Analyses  
collection date June 5, 1984

Station No.	Stream Name	Location	Compound	Concentration (mg/kg=ppm)
G	Soils	Swale-near Junkyard	PCB's	490.00
			Pyrene	<40.00
			Fluoranthene	<40.00
			Olifins	present
			Unknowns	present
H	Toughkenam-untrib.	Scarlet Rd.	DDE	6.5
			DDD	10.00
			DDT	28.00
I	Toughkenam-untrib.	Thompson Rd.	DDE	60.00
			DDD	120.00
			DDT	8500.00
J	Toughkenam-untrib-N.Branch	Chambers Rd.	DDE	10.00
			DDD	8.00
			DDT	25.00
K	Toughkenam-untrib-S.Branch	Chambers Rd.	DDE	150.00
			DDD	120.00
			DDT	320.00
L	Toughkenam-untrib-S.Branch	Center Street	DDE	160.00
			DDD	160.00
			DDT	300.00

1F3(11/.1)

TABLE 2:

West Branch Red Clay Creek  
Chester County  
Summary of Stream Sediment PCB - Analyses  
collection date June 5, 1984

Station No.	Stream Name	Location	Compound	Concentration (mg/kg=ppm)
A	W.B. Red Clay	Old Route One	PCB's	none detected
C	W.B. Red Clay	75 yds. below	PCB's	190.00
D	NVF Trib. <del>South State</del> Street		PCB's	<u>8400.00</u>
F	Soils	Nojenski Junkyard	PCB's	910.00
G	Soils	Swale-near Junkyard	PCB's	490.00

1F3(12)

TABLE 3:

West Branch Red Clay Creek  
Chester County  
Summary of Stream Sediment DDT - Analyses  
collection date June 5, 1984

Station No.	Stream Name	Location	Compound	Concentration (mg/kg=ppm)
B	W.B. Red Clay	upstream-State St.	DDE	6.0
			DDD	7.0
			DDT	14.0
C	W.B. Red Clay	75 yds. below State Street	DDE	18.00
			DDD	15.00
			DDE	700.00
D	NVF Trib.	State Street	DDE	700.00
			DDD	320.00
			DDT	1900.00
E	Sewage Sludge	Kennett Square STP	DDE	1000.00
			DDD	340.00
H	Toughkenam-untrib.	Scarlet Rd.	DDE	6.5
			DDD	19.00
			DDT	23.00
I	Toughkenam-untrib.	Thompson Rd.	DDE	30.00
			DDD	120.00
			DDT	3500.00
J	Toughkenam-untrib-N.Branch	Chambers Rd.	DDE	10.00
			DDD	3.00
			DDT	25.00
K	Toughkenam-untrib-S.Branch	Chambers Rd.	DDE	150.00
			DDD	120.00
			DDT	320.00
L	Toughkenam-untrib-S.Branch	Center Street	DDE	160.00
			DDD	160.00
			DDT	300.00

1F3(13)